

Proceedings of the Environmental Protection Agency
PUBLIC MEETING ON WASTE LEACHING
Session I - Introduction and Overview

Introduction

Due to the critical importance of protecting the nation's ground water resources, laboratory leaching of wastes is a valuable tool for making waste management decisions. Leaching test methods are used to assess: (a) whether a waste should be classified as a hazardous waste, (b) waste treatment process effectiveness, and c) whether land disposal is an appropriate means of managing particular wastes. Leaching tests and data also serve as the source terms for the subsurface fate and transport modeling that is a key component of the risk assessment process on which waste management decisions (such as listing and de-listing) are based. They form the basis for decisions on assessing the effectiveness of waste stabilization processes and for assessing the long term impact that treatment residues will have on the environment.

Current EPA leachability test methods have only been scientifically validated for very limited applications (i.e., hazardous waste characterization and land ban). They have not been shown to be valid for making waste-site specific risk assessments. In addition, even for the waste characterization and land ban applications, the current test procedures have known weaknesses. As a result of these limitations, the Agency does not have the tools necessary to perform the quantitative risk assessments needed to give waste disposers credit for site- and waste-specific factors that might act to reduce the risk to human health and the environment. Such a situation may result in over-regulation. The lack of appropriate testing protocols to adequately evaluate treated wastes may also be acting as a barrier to the use of innovative waste treatment processes.

Recognizing the importance of leaching science, EPA's Office of Solid Waste held a public meeting to address these issues on July 22-23, 1999. The meeting was held in Crystal City, VA, in conjunction with EPA's 15th Annual Waste Testing and Quality Assurance symposium, and provided a forum for Federal and State regulators, research scientists, and the regulated community to:

- discuss issues related to estimating the leaching potential of wastes and contaminated materials,
- discuss the history of the Agency's leachate estimation tests,
- review the state-of-the art with respect to leachate estimation, and
- solicit input on how the issues can be addressed.

This document provides a summary of these discussions, organized in the order in which technical presentations were made. From the agenda, you may select the proceedings of each speaker's presentation, and, where available, a copy of their presentation materials, as well as a list of the attendees: [attendees.pdf](#).